REMARKS

Applicant appreciates the time taken by the Examiner to review Applicant's present application. Applicant has amended Claims 1, 19 and 37 and added Claim 55. Applicant respectfully submits that no new matter has been added. Thus, Claims 1-55 remain pending. This application has been carefully reviewed in light of the Official Action mailed June 25, 2007. Applicant respectfully requests reconsideration and favorable action in this case.

Rejections under 35 U.S.C. § 101

Claims 37-54 stand rejected under 35 U.S.C. § 101. Applicant has amended Claim 37 and respectfully submits that this rejection is now moot.

Specification Objections

The specification stands objected to. Applicant has amended the first paragraph of the specification and respectfully submits this objection is now moot.

Rejections under 35 U.S.C. § 102

Claims 1-54 stand rejected as anticipated by U.S. Publication No. 2005/0044495 ("Lee"). Applicant respectfully traverses this rejection.

It may be helpful to an understanding of the differences between embodiments claimed in the present application and the invention of Lee to give some background information with respect to the field of language input tools. In general, various problems may occur with respect to user input devices:

-**Small, mobile and or otherwise input devices**. Due to restrictions on the form factor, those devices often do not have the physical means to unambiguously input any human written language (e.g. a full keyboard for the language desired). The solution consists in disambiguation: each key of the keyboard is assigned a plurality of alphabetical or other language symbols and as the user presses on the key bearing the symbol he wishes to enter a language input tools tries to figure out which of the symbols associated with that key that the user wishes to enter.

-Ideographic languages like Chinese. Usually these languages use so many symbols that no physical keyboard can realistically be built to directly enter those types of languages as they would require too many keys. Those types of languages are entered into computers by the mean of an artificial written language that mimics the phonetics of the oral form of the language as usually the number of sounds of the language is small enough to fit on a keyboard. This phonetic text input may be translated into the written language of the ideographic language. This may be difficult as phonetic text may be interpreted in multiple ways: in Chinese about 406 oral syllables have to be mapped to more than 30,000 ideograms, and ideograms form natural units. Language input tools are used to help with this translation of phonetic form to the ideogram written form.

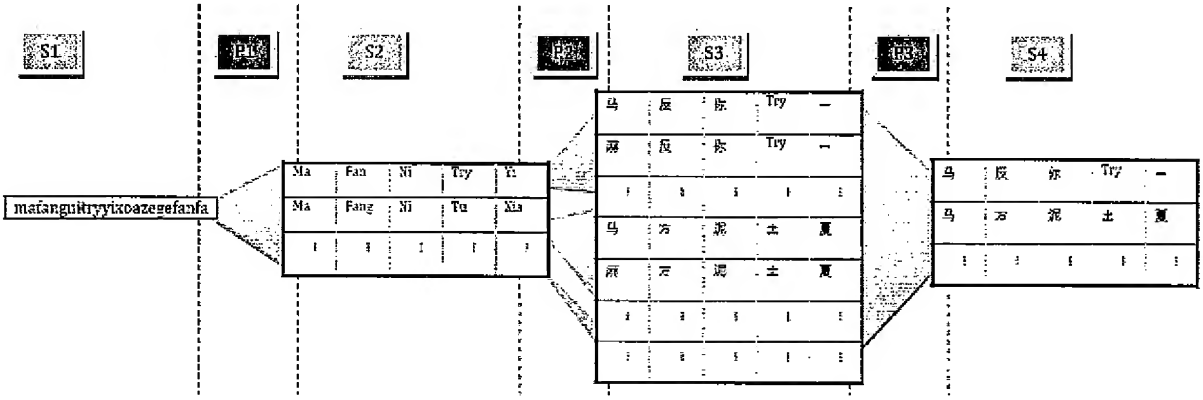
Embodiments of the present invention may be utilized to address the first problem amongst others while Lee is almost exclusively addressed to the second problem.

Turning now to the claims, Claim 1 recites a method for efficient multilingual text input, comprising: formulating a candidate based on a prefix and an input, wherein the candidate comprises a set of symbols and a score, the score calculated based upon one or more symbols associated with the input; formulating a prediction based on the set of symbols associated with the candidate, wherein the prediction comprises one or more predictive completions associated with the set of symbols of the candidate and formulating a proposition based on the candidate or the prediction. Claims 19 and 37 recite similar limitations.

Thus, embodiments of the present invention provide systems and methods for the disambiguation of inputs and predictive completion of a user's input. More specifically, a user may be utilizing a restricted keyboard (e.g. a keyboard where one or more of the keys is associated with a plurality of symbols). Thus when a user presses a key on the keyboard it may be desired to determine which symbol associated with that key the user desires to enter. Thus, a candidate may be formulated based upon a prefix (e.g. the user's previously entered symbols) and one of the symbols associated with the key pressed. In fact, in one embodiment a set of candidates may be formed, each candidate comprising the prefix and one of the plurality of symbols associated with the key pressed by the user. These candidates may then be scored to determine the candidate with the highest score.

Based upon the candidate (e.g. the candidate with the highest score) then, a prediction may be determined, where the prediction comprises one or more predictive completions of the candidate, the predictive completions scored and the prediction with the highest score presented to the user such that the user can confirm the prediction, continue entering symbols or another action taken. This prediction completion may be determined based upon the symbols associated with the candidate. Thus, as can be seen, disambiguation and predictive completion of a user input may be achieved.

In contrast, Lee discloses a architecture to convert input strings of phonetic text to an output string of language text (e.g. Chinese ideograms). Thus, first and foremost Lee is used to convert a phonetic representation of the sounds made when speaking a language to the language text itself. The functioning of Lee may be better understood with reference to the below diagram:



In Lee a user enters phonetic text comprising a sequence of letter representing sound made when speaking the given language (S1). (*See*, Lee, Paragraph [0053], [0054], [0058]) This phonetic text is then passed to the typing model (P1) which generates various typing candidates. These typing candidates (S2) are generated by segmenting the input text in different ways to generate a list of probable typing candidates that take into account possible typographical errors made during keyboard entry of the phonetic text. These typing candidates

(S2) have different segmentations in each time frame such that the end of a previous word is a start-time of a current word. (*See,* Lee, Paragraph [0089]) These typing candidates are then sent to the language model (P2).

The language model then processes (P2) each segment of each of these typing candidates (S2) to generate associated language text (Chinese ideograms) for each of the segments. (*See,* Lee Paragraph [0058]-[0060], [0091]) A set of conversion candidates (S3) can then be generated by utilizing language text associated with one of the set of segments corresponding to each time frame where the set of segments may each be associated with distinct typing candidates. The conversion candidates (S3) are scored (P3) according to probability, which may be done according to a trigram model of ideograms. And the list of conversion candidate proposed to the user in order of decreasing probability (S4). (*See,* Lee Paragraph [0074]-[0089])

Thus, as can be seen, Lee deals with ambiguity between the phonetic representation of a language and the language text itself and thus provides no means for disambiguating the input of a user based upon one or more symbols associated with the input (e.g. a key press) of a user. Nor does Lee predict the completion of a user's input, Lee is solely concerned with translation of previously input phonetic text to language text.

Accordingly, Applicant respectfully submits that Lee does not disclose at least the limitation of Claim 1 which recites:

formulating a candidate based on a prefix and an input, wherein the candidate comprises a set of symbols and a score, the score calculated based upon one or more symbols associated with the input and formulating a prediction based on the set of symbols associated with the candidate, wherein the prediction comprises one or more predictive completions associated with the set of symbols of the candidate.

As Lee does not disclose all the limitations of Claim 1, Applicant respectfully requests the withdrawal of the rejection of Claim 1 and similar Claims 19 and 37 as anticipated by Lee under 35 U.S.C. § 102. For at least the same reasons Applicant respectfully requests the withdrawal of the rejection of Claims 2-18, 20-36 and 38-54 dependent on Claims 1, 19 or 37.

Conclusion

Applicant has now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include an acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of Claims 1-55. The Examiner is invited to telephone the undersigned at the number listed below for prompt action in the event any issues remain.

An extension of 1 month is requested and a Notification of Extension of Time Under 37 C.F.R. § 1.136 with the appropriate fee is enclosed herewith.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

Sprinkle IP Law Group
Attorneys for Applicant

Ari G. Akmal
Reg. No. 51,388

Date: October 25, 2007

1301 W. 25th Street, Suite 408
Austin, TX 78705
Tel. (512) 637-9220
Fax. (512) 371-9088